**Amendments to the Claims**:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for producing a single crystal with pulling the single crystal from a raw material melt in a chamber by Czochralski method, wherein during growing the single crystal, where a pulling rate is defined as V (mm/min) and a temperature gradient of the crystal in the direction of pulling axis at the vicinity of a solid-liquid interface is defined as G (°C/mm) during growing a straight body of the single crystal, the temperature gradient G of the crystal is controlled by changing at least two or more of pulling conditions including a diameter of the straight body of the single crystal, a rotation rate of the single crystal during pulling the single crystal, a flow rate of an inert-gas introduced into the chamber, a position of a heater heating the raw material melt and a distance between a melt surface of the raw material melt and a heat insulating member provided in the chamber so as to oppose to the surface of the raw material melt, thereby V/G ($mm^2$/°C · min) which is a ratio of the pulling rate V and the temperature gradient G of the crystal is controlled so that a single crystal including a first defect region is grown.

2. (Original) The method for producing a single crystal according to Claim 1, wherein the single crystal is pulled with keeping the pulling rate V constant.

3. (Previously Presented) The method for producing a single crystal according to Claim 1, wherein V/G is controlled so that the defect region of the single crystal to be grown is N region over a whole plane in a radial direction.

4-7. (Canceled)

8. (Previously Presented) The method for producing a single crystal according to Claim 2, wherein V/G is controlled so that the defect region of the single crystal to be grown is N region over a whole plane in a radial direction.

9. (Previously Presented) The method for producing a single crystal according to Claim 1, wherein at least two or more of the pulling conditions are changed automatically according to changing conditions obtained by performing an experiment beforehand.

10. (Previously Presented) The method for producing a single crystal according to Claim 2, wherein at least two or more of the pulling conditions are changed automatically according to changing conditions obtained by performing an experiment beforehand.

11. (Previously Presented) The method for producing a single crystal according to Claim 3, wherein at least two or more of the pulling conditions are changed automatically according to changing conditions obtained by performing an experiment beforehand.

12. (Previously Presented) The method for producing a single crystal according to Claim 8, wherein at least two or more of the pulling conditions are changed automatically according to changing conditions obtained by performing an experiment beforehand.

13. (Previously Presented) The method for producing a single crystal according to Claim 1, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

14. (Previously Presented) The method for producing a single crystal according to Claim 2, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

15. (Previously Presented) The method for producing a single crystal according to Claim 3, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

16. (Previously Presented) The method for producing a single crystal according to Claim 8, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

17. (Previously Presented) The method for producing a single crystal according to Claim 9, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

18. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

19. (Previously Presented) The method for producing a single crystal according to Claim 11, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

20. (Previously Presented) The method for producing a single crystal according to Claim 12, wherein the changing conditions that change at least two or more of the pulling conditions are adjusted among batches for producing the single crystal.

21. (Currently Amended) The method for producing a single crystal according to Claim 1, wherein the raw material melt is a polycrystalline material such that a silicon single crystal is pulled as the single crystal.

22. (Currently Amended) The method for producing a single crystal according to Claim 2, wherein the raw material melt is a polycrystalline material such that a silicon single crystal is pulled as the single crystal.

23-24. (Canceled)